Assembly Instructions

Sequence® Seating with Power & USB

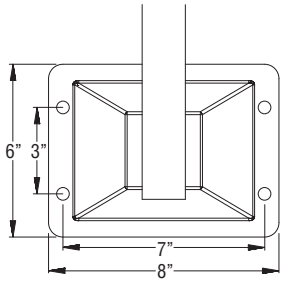
December 2022

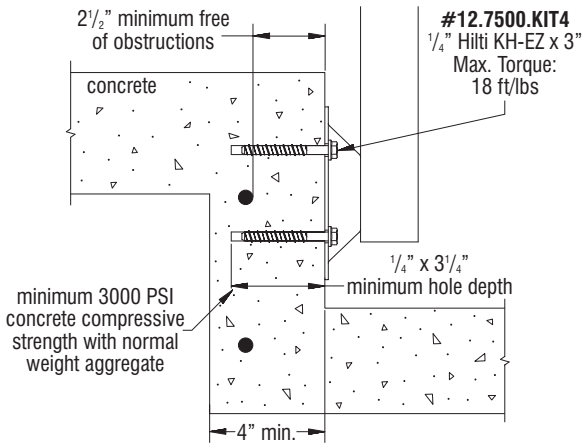
Furnishing Knowledge®

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Riser Mount Specifications



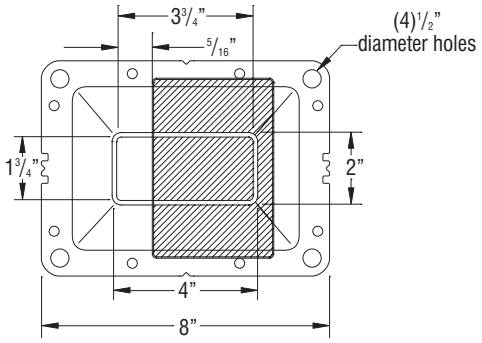


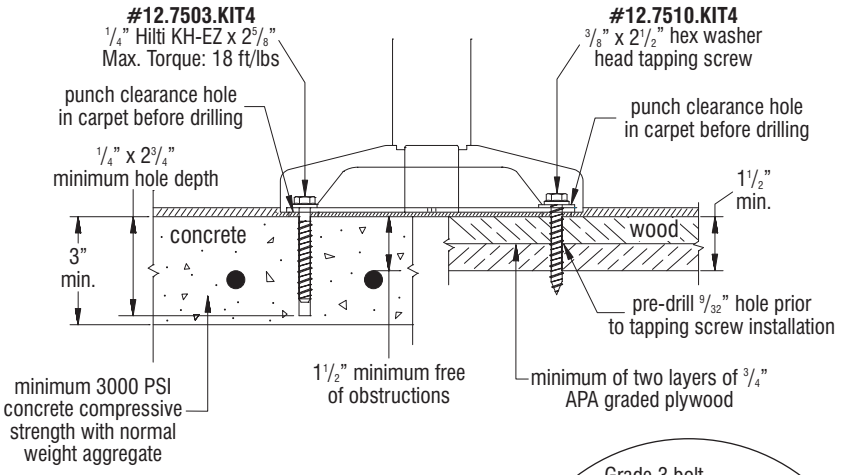
Applied Load Per Anchor With A Three Time Safety Factor

Tension (lbs)	Shear (lbs)
4050	900

Actual Calculated Moment At Base (in-lbs) With 325lb Load
13,410

Floor Anchor Specifications

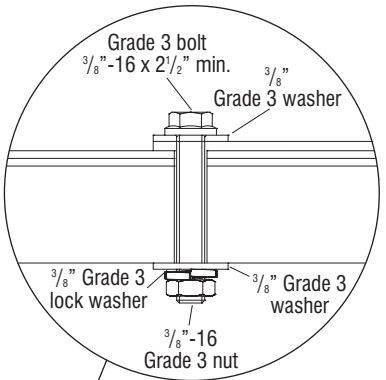




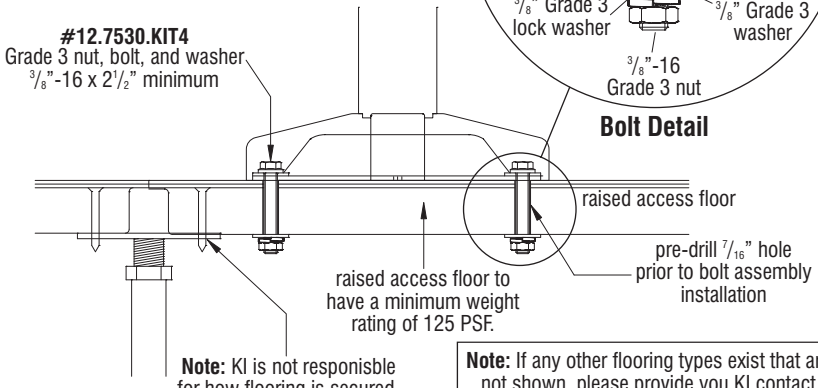
Applied Load Per Anchor With A Three Time Safety Factor

Tension (lbs)	Shear (lbs)
3510	240

Actual Calculated Moment At Base (in-lbs) With 325lb Load
15,830



Bolt Detail



Note: KI is not responsible for how flooring is secured. See applied loads.

Note: If any other flooring types exist that are not shown, please provide you KI contact with the detailed floor specifications.

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TOOLS REQUIRED

- Hammer drill and bit for concrete anchor holes
- Drill and bit for pilot holes in wood floor
- #3 Phillips head screwdriver bits
- #2 Phillips head screwdriver bits
- Drill motor
- Drill bits set
- Socket set
- Pliers
- Chalk line
- Tape measure
- #25 Torx head driver (for power & data only)
- #27 Torx head driver (for power & data only)

Note: Read these assembly instructions carefully prior to product installation. Product failure and personal injury may result if instructions are not followed.

MINIMUM CONSTRUCTION REQUIRED FOR UPRIGHT INSTALLATION

Wood Floors

- Minimum two layers of $^{3}/_{4}$" thickness tongue & groove
- APA rated grade plywood
- Allow minimum embedment $1^{1}/_{2}$" with lag screws

Concrete Floors

- 3000 psi Concrete compressive strength
- 3" thick free of obstructions for $1^{1}/_{2}$"
- 4" thick for riser mount free of obstructions for $2^{1}/_{2}$"
- Riser to be plumb within $^{1}/_{8}°$
- Minimum anchor embedment $1^{1}/_{2}$"

Note: Warranty null and void if KI product is installed on flooring not meeting minimum structural requirements stated above.

FLOOR FASTENER REQUIREMENTS

Wood Floors

- $^{5}/_{16}$" x $1^{3}/_{4}$" lag bolts; Grade 3
- $^{5}/_{16}$" flat washers
- $^{3}/_{8}$" toggle bolts
- All hardware to be plated
- Four bolt assemblies required per base

Concrete Floors

- $^{5}/_{16}$"-18 or $^{3}/_{8}$"-16 Grade 3 expansion anchors
- Standard flat washers, plated
- LockTite (red) thread lock or equal
- Four screw assemblies required per base

Note: Floor-mounting fasteners are <u>not</u> provided unless specified.

- For questions concerning anchor selection and special floor conditions, please contact KI Customer Service at 1-800-424-2432.

STEPS FOR INSTALLATION

1. Read and review Assembly Instructions.
2. Review space-planning layouts.
3. Review job site and verify field conditions.
4. Verify floor structural conditions.
5. Stage product for installation.
6. Locate and mark layout reference points.
7. Locate and drill holes into floor.
8. Mount bases to floor or riser.
9. Install optional power & USB systems if required.
10. Attach seats.
11. Attach tablet.
12. Install plastic flange covers.

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Base & Beam - Basic Installation

1. Stage bases and beams at the desired location according to the space-planning layout. Check aisle dimensions, row-to-row distance, clearance of seats and tables to walls and interferences with columns, electrical outlets, floor access hatches, etc.

2. Remove carpet for full contact of base flange with mounting surface, or punch out carpet at anchor locations.

3. Mount base flanges to floor with appropriate fasteners, referencing "Floor Anchor Specifications" details on page 2. Center the black flange clips (12.0950) under both 6" sides of base flange, with the barbs up. Insert the locating tabs of the flange so that they are tight into the base flange notches. After all bases are positioned and adjusted with shims, securely tighten base flanges to the floor (Figure 1). Do not install plastic flange covers until step 35, page 14.

4. If power & USB is to be installed, assemble following the directions below. If no power and USB is required, skip now to page 11, Figure 12 and resume with basic installation.

Sequence Seating with Power & USB

Tools Required:

- #25 Torx head driver bit
- #27 Torx head driver bit

5. Begin assembly by reviewing the space-planning layout as well as this basic Sequence Seating Assembly Instructions, following the power & USB section. Per the space-planning layout, take note of all power infeed locations, as well as quantities and placement of the various wireway assemblies including circuit numbers and locations.

6. Attach 90° brackets to the bottom of yoke cover plates or the yoke plates of outboard bases as illustrated, using two #12-24 x $^1/_2$" pan head #27 Torx drive screws. Torque screws to 50 in/lbs to secure. (Figure 2).

Note: 90° brackets should be assembled to all outboard bases before the bases are secured to the floor. Do not install 90° brackets on any end-of-row bases as the wireway stops between the end two seats.

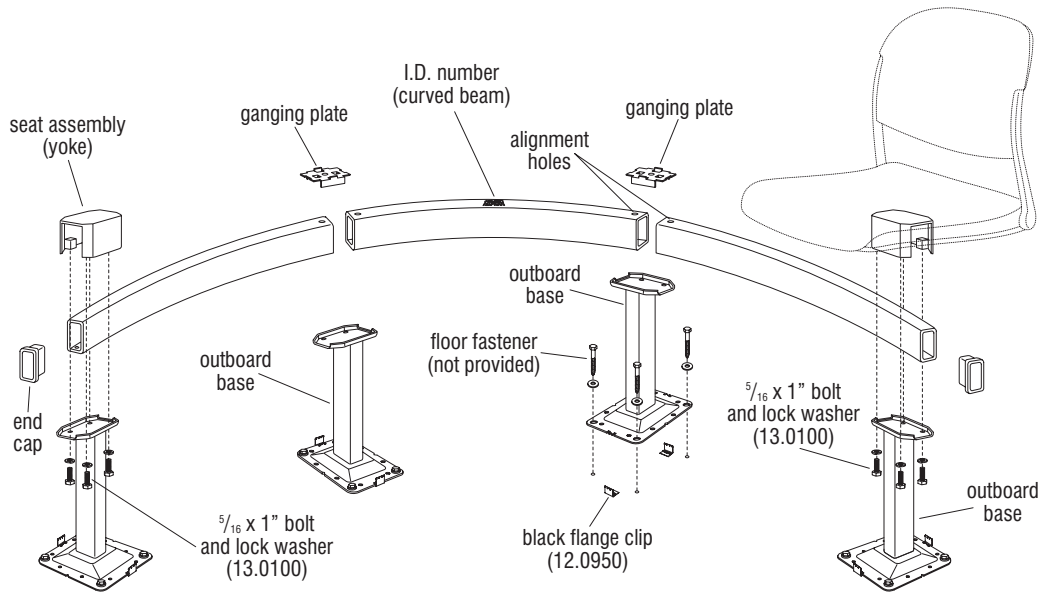

Figure 1

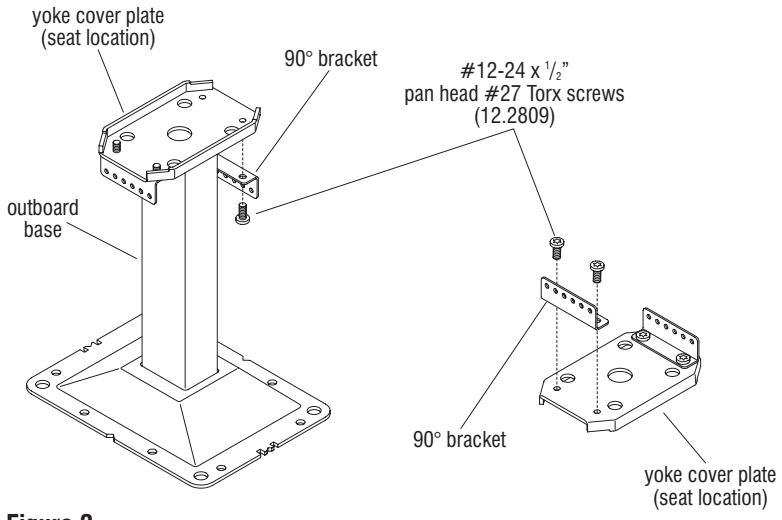

Figure 2

CAUTION

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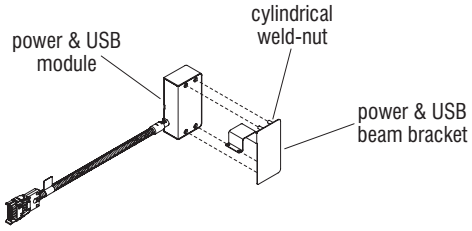


Figure 3

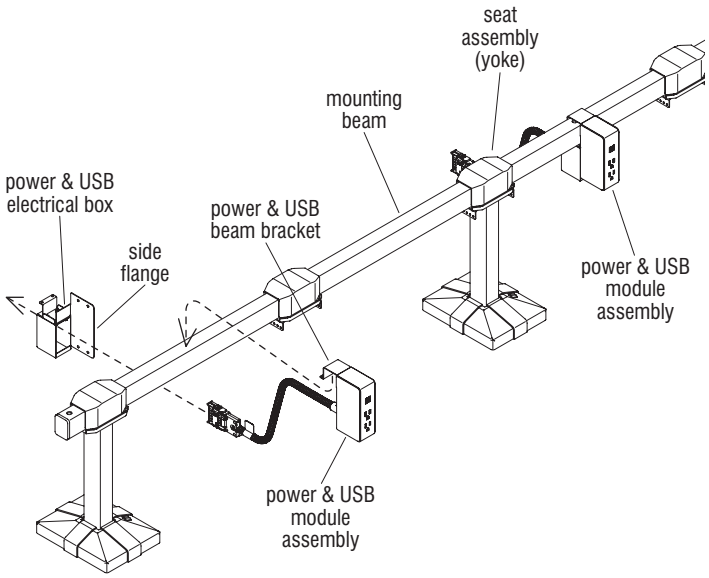
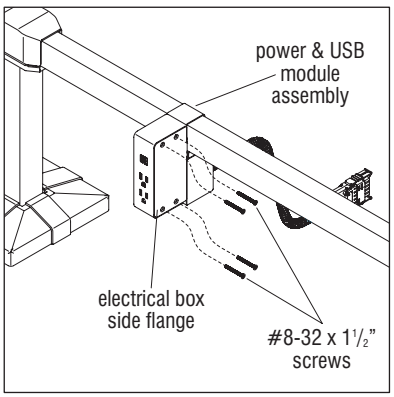


Figure 4



Detail A

Power & USB Module Installation

7. The "Base & Beam, Basic Installation" instructions on page 4 (Figure 1), outlined installation of bases and beams per the space-planning layout. Page 11 outlines riser mount base installation, as well as joining of beams under seats. At this time, follow "Seats to Beam Installation" instructions on page 12 to assemble the various seat models to beam locations, per the space-planning layout. In the "Power & USB Module Installation" instructions to follow, seats are not shown installed to allow for more clarity to install the power and USB module option.
8. Position the power & USB module, with the connector end and the four mounting holes as illustrated. Next orient the power & USB beam bracket as illustrated, such that the cylindrical weld-nuts on the inside of the bracket face the four mounting holes in the side of the power & USB bracket. Press the beam bracket onto the side of the power & USB module, inserting the four weld-nuts into the four mounting holes and "snap" the two together (Figure 3).
9. One unit at a time, route the connector end & cable of the power & USB module assembly under the beam, then set the power & USB beam bracket (with module assembly) onto the top of the beam as illustrated, nesting the bracket to hang in place at the appropriate location per the space-planning layout. If power & USB unit is placed between seats with a tablet arm, position it so the module will not interfere with the tablet when it is rotated down for storage. Next, position the power & USB electrical box at the other side of the beam as illustrated, and route the connector end & cable of the module assembly through the back opening in the power & USB electrical box. Move the box toward the beam and rotate it such that the side flange of the electrical box goes under the beam and up square against the side of the power & USB module assembly, while also nesting the bracket at the top of the electrical box around the underside of the beam, aligning it with the power and USB beam bracket just above it (Figure 4).
10. Once the power & USB module assembly and electrical box are mated together around the beam, four holes on the side flange of the electrical box will align with four holes on the side of the power & USB module assembly. Secure the flange to the module using four #8-32 x 1½" screws as illustrated (Detail A).

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Wireway Installation

11. As specified on the space-planning layout, locate, stage and identify the three specific wireway extrusion types: "center wireway", "left-hand wireway" and "right-hand wireway", taking care to locate center wireway (no module) and center wireway (with module) at the specified locations (Figure 5).

12. Per the space-planning layout a "center wireway" will be specified as "with module", or "no module". In all locations where "no module" is specified to a center wireway, orient as illustrated and secure a wireway hanger over the opening using four #10-24 x 1/2" Torx screws. Torque screws to 25 in/lbs., taking care to not strip the material (Figure 5).

13. One at a time, assemble the left-, right- and center wireway (with module) units to the back of the appropriate wireway. To do this, first open the hinged doors at the back of the wireway. Orient the wireway as illustrated and pass the connector end & cable of the module through the opening in the front of each wireway. Next align the mounting holes of the wireway and module, then secure using four #10-24 x 1/2" Torx screws. Torque screws to 25 in/lbs., taking care to not strip the material. Leave the hinge door open, and the cable with connector end hanging loose at this time (Figure 6).

14. Loosely attach the left-, right- and center wireway (with module) units to the beam bracket using two #10-24 x 1/2" screws each. Each wireway is attached slightly loose for the purpose of re-positioning at a later time (Figure 6).

15. To install the "no module" center wireway, first orient a module mounting strap with the opening face down, and with the assembly hole in the strap facing the rear as illustrated. Next, spread open the 3/4" gap at the bottom of the module mounting strap and position it over the 1 1/2" beam, between a seating location where the "center wireway (no module)" will install. **Be sure to position the strap with the assembly hole in the correct direction. The hole must face the rear of the room** at all "no module" center wireway locations (Figure 6 & Detail B).

16. One at a time, assemble each no module center wireway unit to the underside of the beam. To do this, squeeze the mounting strap tight to the beam and lift the appropriate no module wireway assembly to the strap. When the horizontal holes align, insert a screwdriver through the square hole in the module and into the round hole on the rear of the mounting strap. This allows the use of both hands to insert the four #10-24 x 1/2" screws to attach the module to the mounting strap. Torque screws to 25 in/lbs at a later time, as instructed in step 28, page 9. After each no module center wireway is attached, leave each screw slightly loose for the purpose of re-positioning at a later time (Figure 6 & Detail B).

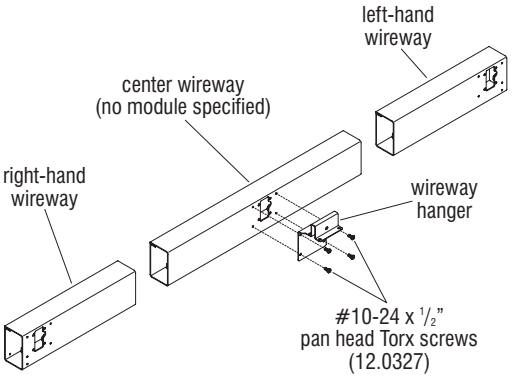
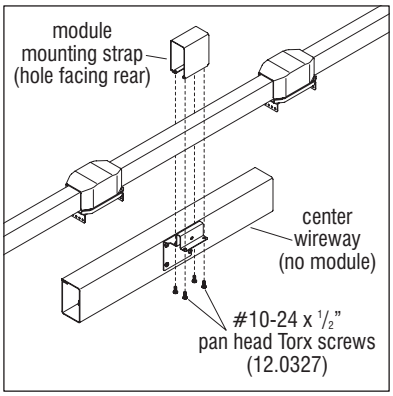


Figure 5



Detail B

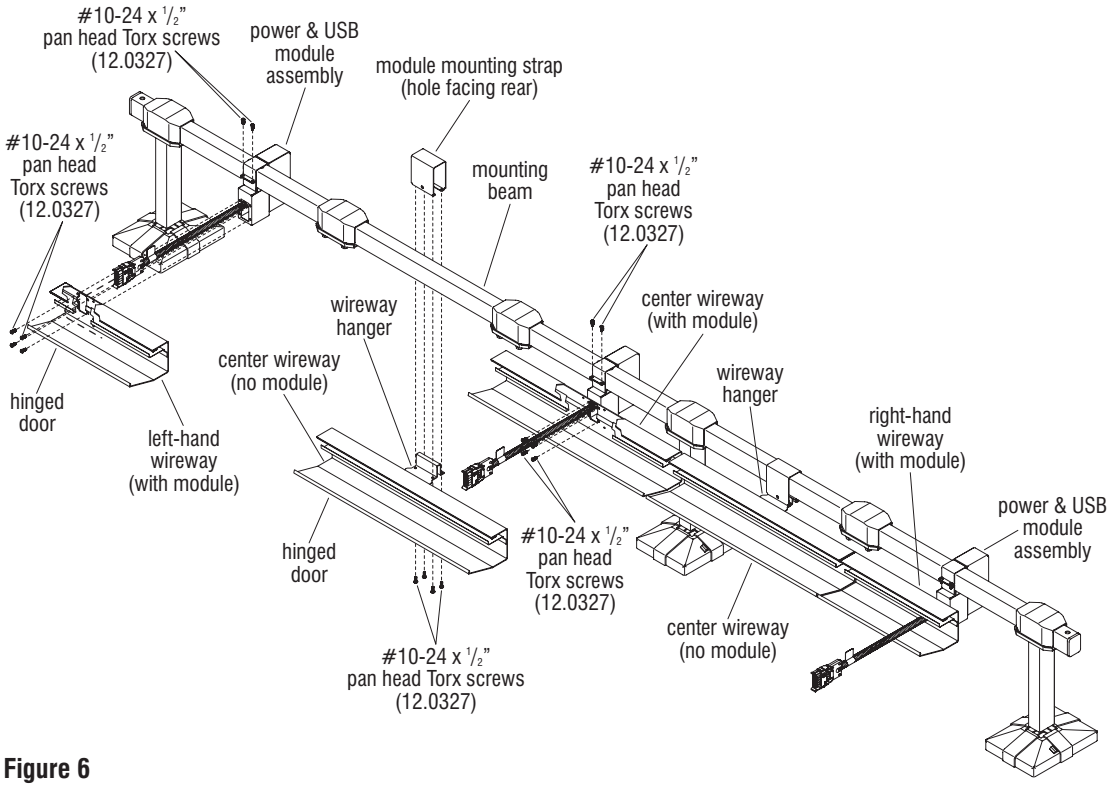


Figure 6

WARNING: Assembly of all mechanical frame components must be completed before making any electrical connections. All electrically connected furnishings must also be mechanically connected.

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810 8-Wire Electrical Assembly

Note: All beam to base and wireway/module connections must be securely fastened before any power infeed or electrical connections between power & USB modules are made.

17. Begin electrical component assembly at the power infeed end of a row. Per the space-planning layout, stage the power infeed end-cover to the right- or left-hand end wireway where power will enter (right-hand shown). **Do not attach loose 8-wires to building power source until instructed to do so.** The power to each wireway must enter through the top knock-out of the power infeed end-cover. Orient the power infeed end-cover up to the power infeed wireway as illustrated and align to the end wireway mounting holes to determine the "top" knock out, then set aside for now (Figure 7).

18. As illustrated, feed the power infeed 8-wires through the straight flexible conduit connector, through the top knock-out in the power infeed end-cover, then through the 90° pulling elbow access hole. Twist the elbow onto the straight flexible conduit connector over the infeed end-cover, feed the trailing wires back in through the access hole and replace the access cover to the 90° pulling elbow. Measure and cut an appropriate length liquid-tight conduit, run the 8-wires through a straight liquid-tight connector, through the liquid-tight conduit and connect conduit and connector to the 90° pulling elbow (Figure 7).

19. At the power infeed wireway (right-hand end shown), attach the connector ends of both the power infeed and the first power & data module into a quad block. **Do not secure the power infeed end-cover onto the module until instructed to at a later time.** Per the space-planning layout, continue down the row of with module and no module wireway units, attaching module connector ends and quad blocks together until reaching the second-to-last module in the row (Figure 7).

20. At the end of the row, use an appropriate size power jumper and quad block to connect the last, and second to last module connector ends together into the electrical circuit (Figure 7).

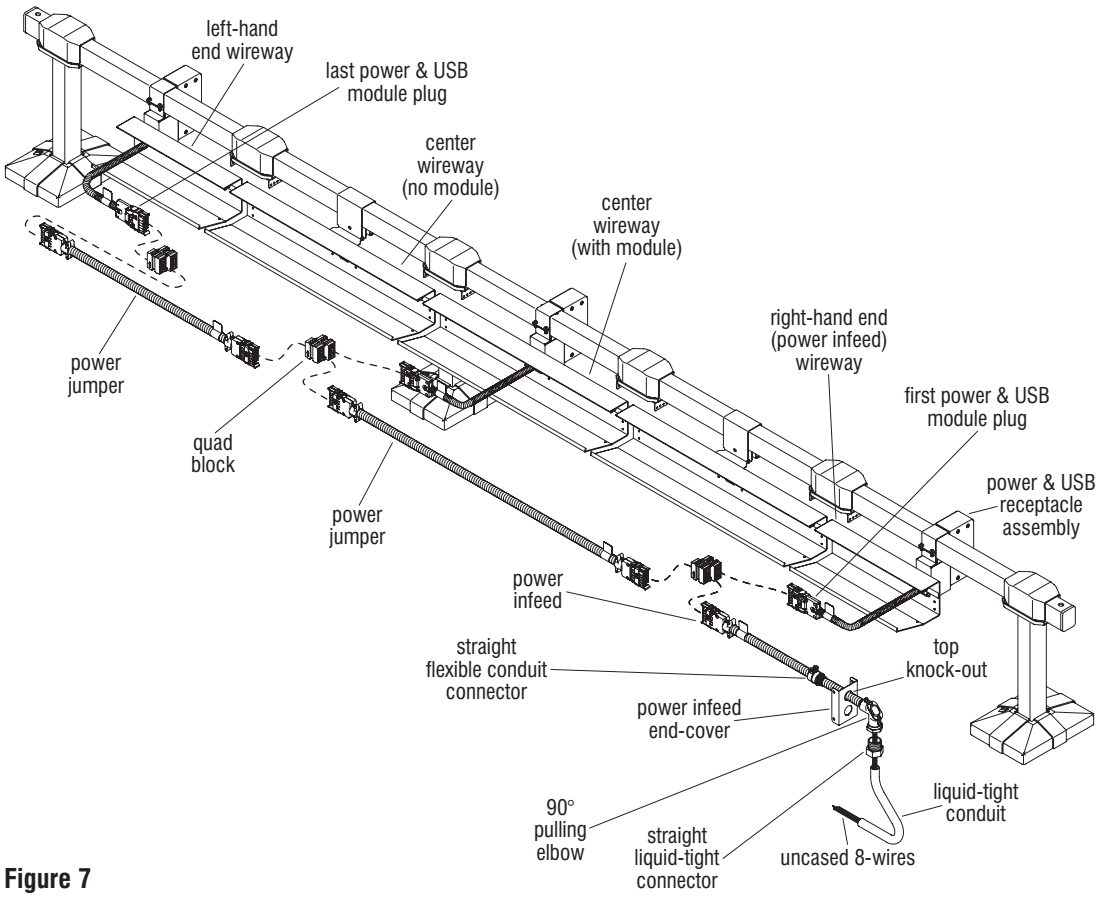

Figure 7

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810 8-Wire Electrical Assembly (cont.)

21. When the space-planning layout calls for power infeed to a row of only one or two seats, the wireway used is a standard right-, or left-hand wireway (right-hand shown), and each being either long or short depending on seat spacing specified (Figure 8).

22. Follow steps 17 & 18 (Figure 7) page 7 to install power infeed, but do not secure the power infeed end-cover to the module and wireway door, or connect the 8-wires to the power source until instructed at a later time. Connect a quad block to the power & USB module connector end and the power infeed 8-wire connector as illustrated (Figure 8).

23. Once power and USB wiring has been completed, close the wireway doors and install the power infeed end cover to the wireway using four #10-24 x $^1/_2$" Torx screws. Torx screws to 25 in/lbs, take care not over-tighten, or strip out mounting holes (Figure 9).

24. Install U-bracket to the opposite end of the wireway using four #10-24 x $^1/_2$" Torx screws. Torx screws to 25 in/lbs, take care not over-tighten, or strip out mounting holes (Figure 9).

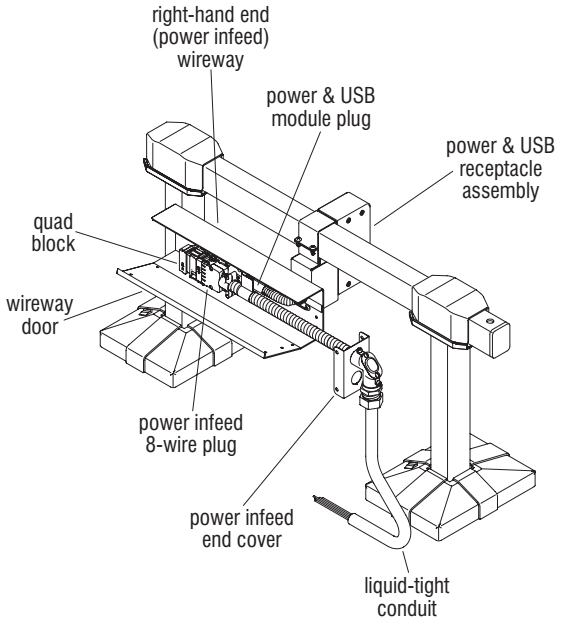

Figure 8

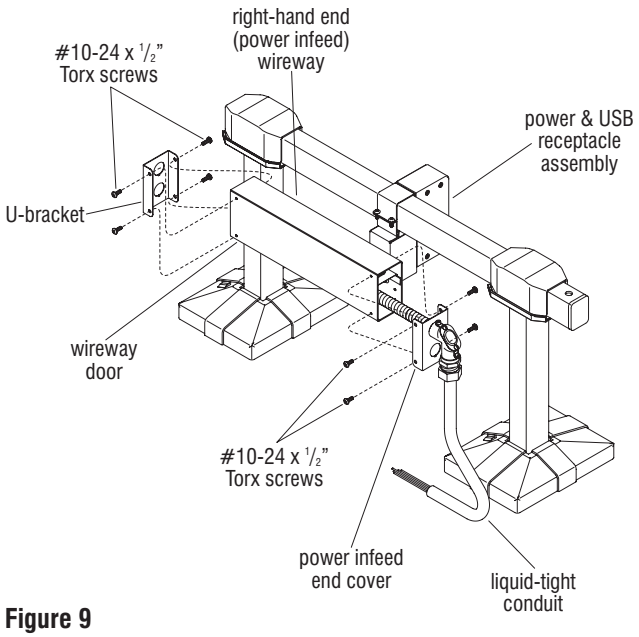

Figure 9

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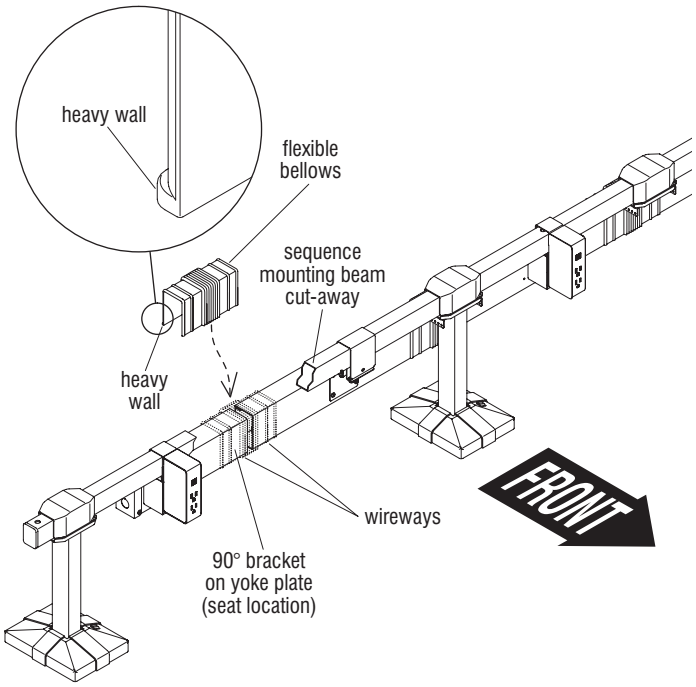

Figure 10

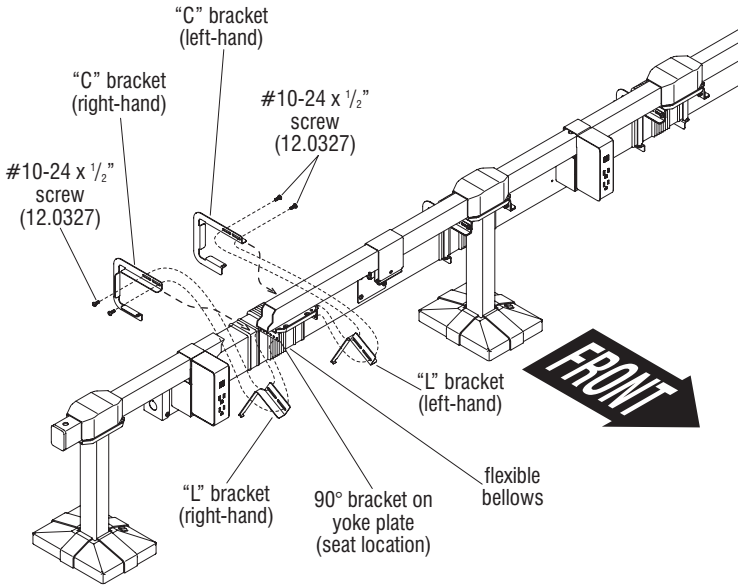

Figure 11

25. Once all electrical connections have been made, and wireway doors are closed, check positioning of modules along the beam for interference at tablet arm locations (if any). Re-adjust module and wireway placement if necessary.

26. As illustrated, orient the flexible bellows so the heavy wall faces the back of the room (away from the beam), then center the flexible bellows over each gap and slide them onto the wireways (Figure 10).

27. Orient the left- and right-hand "C" brackets as illustrated, and slide them onto the flat, end section of the flexible bellows. Then, from the other side of the wireway, position the right- and left-hand "L" brackets as shown. Insert the small tabs at the bottom of the "L" brackets into the lower slots on the right- and left-hand "C" brackets, then rotate the top of the "L" brackets up until the top flange of the "L" brackets make contact with the top of the "C" bracket as well aligning all at the mounting holes of the 90° bracket under the yoke plate. Squeeze the brackets firmly to the wireway and attach each set of brackets together at the 90° bracket using two #10-24 x 1/2" Torx screw. Torque screws to 25 in/lbs (Figure 11).

    Note: Depending if the beam is straight or curved, you may need to either compress or stretch the flexible area of the bellows to align it with the "C" brackets.

28. Once all of the flexible bellows are secured using the "C" & "L" brackets, check again for any tablet arm interference, re-adjust if necessary and return to tighten the four screws of the module mounting straps (left loose in step 16, page 6).

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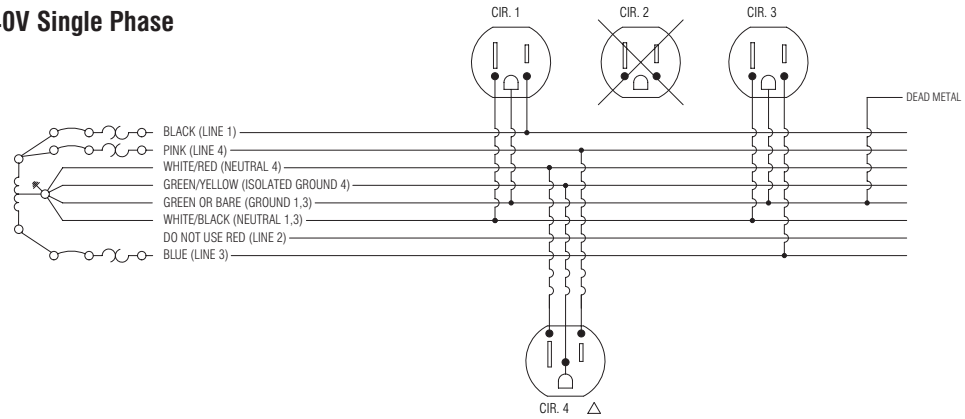
810 8-Wire Connection Diagrams
Have a certified electrician hard-wire the panel power infeed to the building power source according to the National Electrical Code and any other applicable local codes. See the chart for proper wiring connection to available power.

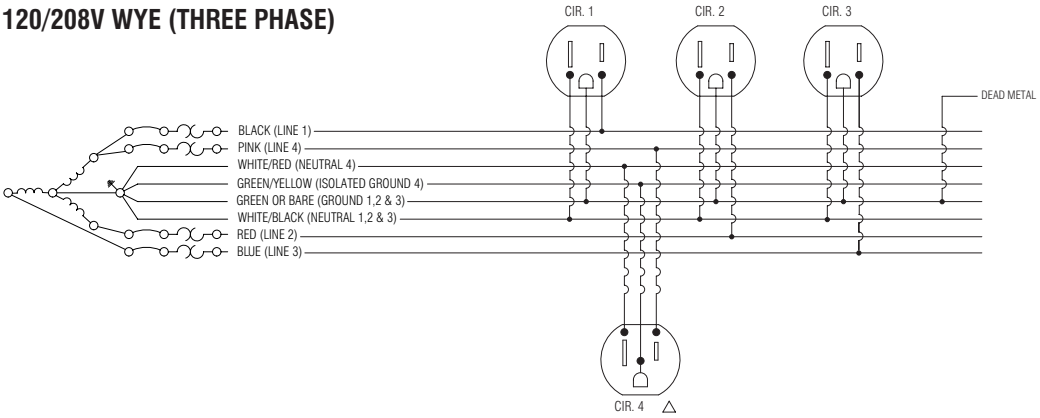
Configuration Shown Is:
3 Utility Receptacles
1 Isolated Ground Receptacle

4-2-2		
Receptacles available	Wires to be used	Gauge of wire
Circuit 1	Black White/Black Green or Bare	12 10 12
Circuit 2	Red White/Black Green or Bare	12 10 12
Circuit 3	Blue White/Black Green or Bare	12 10 12
Circuit 4l	Pink White/Red Green/Yellow	12 10 12

120/240V Single Phase



120/208V WYE (THREE PHASE)



WARNING!

Risk of fire or electric shock. This office furnishing system may be connected to more than one source of supply. All sources must be disconnected prior to any servicing. No single circuit may be powered by more than one source.

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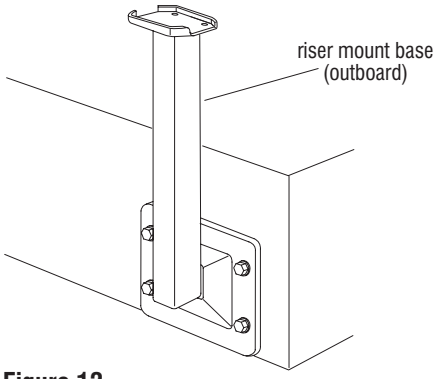

Figure 12

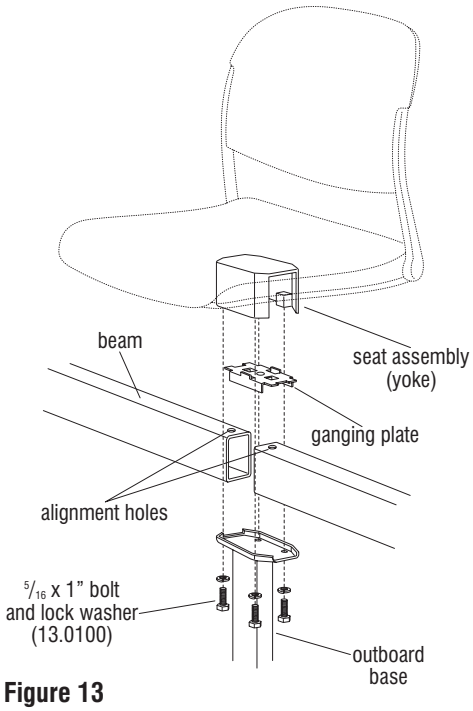

Figure 13

Basic Sequence Seating

29. Mount base flanges to floor with appropriate fasteners, referencing "Floor Anchor Specifications" details on page 2. Center the black flange clips (12.0950) under both 6" sides of base flanges, with the barbs up. Insert flange barbs so that they are tight to the base flange notches. After all bases are positioned and adjusted with shims, securely tighten base flanges to the floor (Figure 1). Do not install plastic flange covers until step 35.

30. To install riser mount bases to riser surface, refer to the space-planning layout for specified mounting locations. Reference "Riser Mount Specifications" details on page 2 for appropriate fasteners and secure riser bases to riser (Figure 12).

31. To join beams at seating locations, first remove end caps where beams are to be joined. Position beams end-to-end. A ganging plate joins the two beams inside a yoke with tabs that engage the alignment holes in the beams (Figures 1 & 13).

    Caution: Failure to properly install ganging plate can result in severe injury.

32. To join beams under Doni, Grazie, LimeLite, Wave, Strive, Strive Nesting, Piretti Torsion, and Piretti 2000 Task, the beams to be joined rest on the yoke plate of an outboard base with the beam holes facing up. Place the ganging plate onto the beams and engage the tabs of the ganging plate into the alignment holes in the beams. From under the yoke plate of the outboard base, attach the plate to the yoke of the seat spider with four $^{5}/_{16}$" x 1" hex head bolts and lock washers. Torque bolts to 21 ft/lbs to secure (Figure 13).

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Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

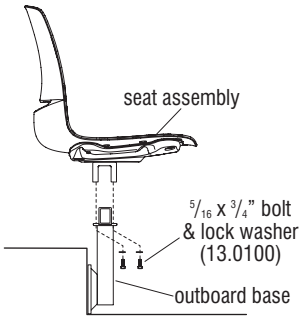
Seats to Beam Installation

33. Refer to the space-planning layout and attach the appropriate seating assemblies to either the seat spider or the beam and outboard base as illustrated and described below.

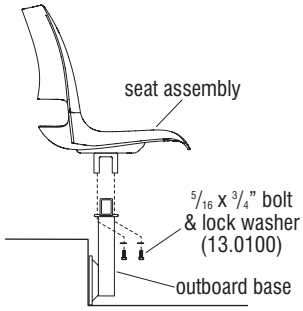
Note: When staging seat shells for Sequence HD or Grazie Nesting, do not stack seats together or rest any objects on the seats (including other seats) as damage to upholstery and foam may occur.

Doni, Grazie, LimeLite, Torsion, Sequence HD, Wave, Strive & Strive Nesting: Place the yoke of the seat assembly onto the beam at the desired location. Hold a yoke plate (or yoke of an outboard base) under the beam and align the four holes of the plate with the holes of the yoke. Secure with four $^{5}/_{16}$ x 1" bolts and lock washers from under the plate. Torque bolts to 21 ft/lbs.

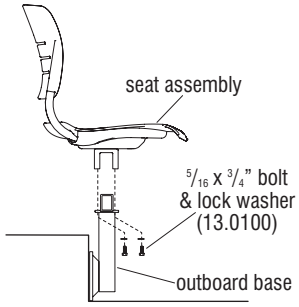
Apply Seats: Turn the seat upside down onto a soft, protective surface and align the seat spider over the seat bottom mounting locations. Secure the spider to the seat with four #$^{1}/_{4}$-20 x $^{1}/_{2}$" hex head screws and torque to 10 ft/lbs. Do not over-tighten. Next, turn the assembly over and align yoke of the seat/spider assembly over beam at the desired location. Hold a yoke plate (or yoke plate of an outboard base) under the beam and align the four holes of the plate with the holes of the yoke. Secure with four $^{5}/_{16}$ x 1" bolts and lock washers from under the plate Torque bolts to 21 ft/lbs.



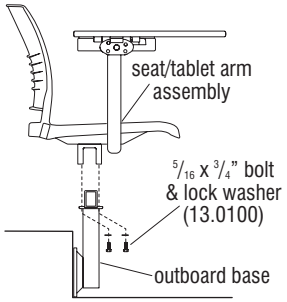
LimeLite



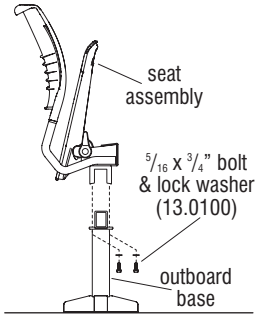
Doni



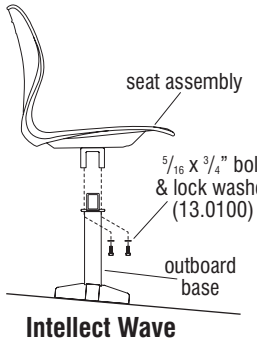
Grazie



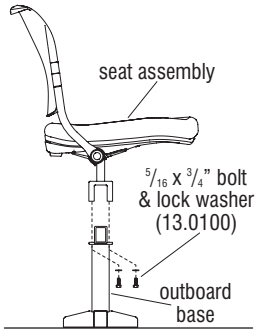
Strive



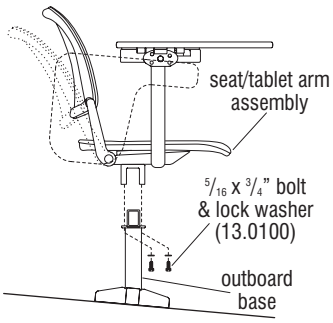
Strive Nesting



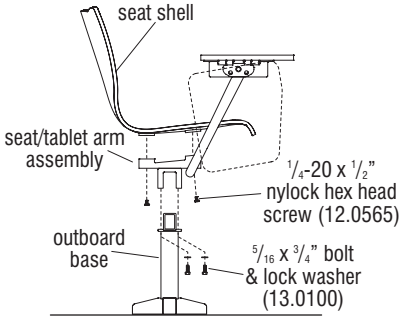
Intellect Wave



Sequence HD & Sequence HD Air



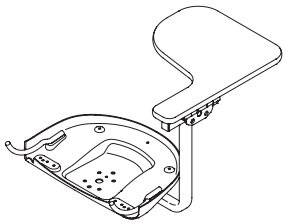
Torsion & Torsion Air



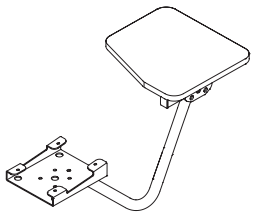
Apply

CAUTION

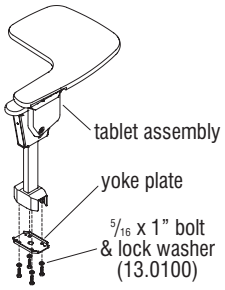
Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.



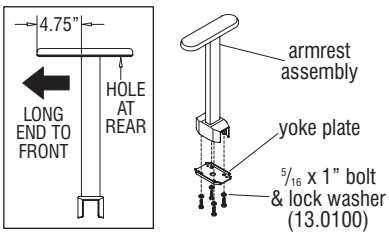
"G2" Tablet



"K2" Tablet



Sequence HD Tablet



Sequence HD Armrest

34. Attach appropriate tablet surface and/or tablet arm assembly as illustrated and described below.

    "G2" Tablet: Installed at factory.

    "K2" Tablet: Installed at factory.

    Sequence HD Tablet & Armrest: Table and armrest surfaces are attached at the factory. Place the yoke of the Tablet or Armrest onto the beam at the desired location. **Note: Longer end of armrest should face forward as in detail.** Hold a yoke plate under the beam and align the four holes of the plate with the holes of the yoke. Secure with four $^{5}/_{16}$ x 1" bolts and lock washers from under the plate. Before tightening fully, check and adjust level from front-to-back. Torque bolts to 21 ft/lbs.

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Flange Cover Installation

35. To install the plastic flange covers (floor mounted bases only), first locate the front and rear tabs on the covers and remove. Take care to not remove the side tabs for this application. Snap the flange covers together around the column and press down to engage the flange clips. Push tight to the floor (Figure 14).

    Note: When installing Sequence HD units to sloped floors, plastic flange covers are not installed.

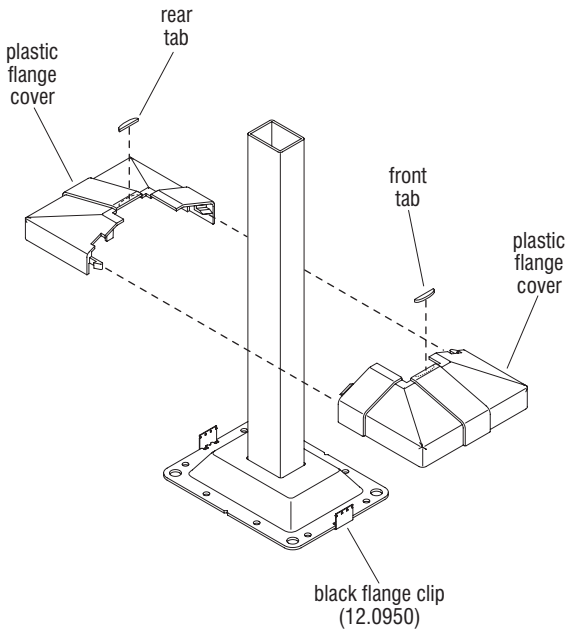


Figure 14

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